

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER TEXAS

STRAGENT, LLC, ET AL		DOCKET 6:11CV421
VS.		MARCH 6, 2014
INTEL CORPORATION		WASHINGTON, D.C.

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REPORTER'S TRANSCRIPT OF PRETRIAL HEARING

BEFORE THE HONORABLE TIMOTHY B. DYK
UNITED STATES FEDERAL CIRCUIT JUDGE

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1 (OPEN COURT, ALL PARTIES PRESENT.)

2 THE COURT: Good morning. I'd like to begin
3 by taking an inventory of what issues there are for me to
4 decide this morning. And I should tell you that this
5 morning posted two orders, one relating to standing; and
6 I've approved the magistrate's decision on standing. So,
7 the sole plaintiff here will be Stragent.

8 And the other issue relates to the Stragent
9 expert report on damages; and with respect to that, I
10 will allow testimony about the two licenses; but I will
11 not allow the hedonic analysis because I've concluded
12 that it is unreliable. You'll be able to review those
13 opinions during a recess, and you can ask any questions
14 that you'd like to about it.

15 Why don't we begin by having counsel identify
16 themselves.

17 MR. ALBRITTON: Thank you very much, your
18 Honor. Eric Albritton on behalf of the plaintiff. With
19 me is Barry Bumgardner, Melanie Bostwick, and Mike
20 Joffre; and we're ready to proceed, your Honor.

21 THE COURT: Okay.

22 MR. CAMPBELL: Good morning, your Honor. Chad
23 Campbell for Intel. I'm joined by my colleagues Tim
24 Franks and Aaron Matz. We also have from Intel Chris
25 Kyriacou and Tina Chappell.

1 THE COURT: Okay. Thank you.

2 Now, I've received the objections to the
3 preliminary instructions; and I'm going to make all the
4 changes that both sides proposed, with one exception; and
5 that is with respect to the damages instruction. Let me
6 see if I can find this.

7 I'll have to come up with the language later
8 on.

9 And then I've received the objections with
10 respect to some of the exhibits. I have not had a chance
11 to review those objections. I'll do that during one of
12 the recesses that we have so that we can address that.

13 And then I have some concerns about some of
14 the final instructions and want to discuss that,
15 particularly the instructions concerning invalidity which
16 seems to me -- which seem to me to be somewhat abstract
17 and complicated. And I'd like to be able to simplify
18 them, and I'm going to ask each side to give me new
19 proposed instructions on invalidity hopefully by the end
20 of the day tomorrow.

21 And I think for the moment -- and also a new
22 verdict form.

23 Are there other items that we should be
24 addressing today besides those?

25 MR. ALBRITTON: Not on behalf of the

1 plaintiff, your Honor.

2 UNIDENTIFIED SPEAKER: I'm not aware of
3 anything either.

4 THE COURT: Okay. Well, why don't we begin
5 with claim construction argument. I have concluded that
6 there is a claim construction issue here that I need to
7 resolve; so, I don't want to hear argument on whether
8 there is a claim construction issue but, rather, argument
9 on the merits of the two sides' claim constructions.

10 Why don't we begin by giving each side 15
11 minutes to address the 3 claim construction issues, and
12 then we'll see where we go from there.

13 So, Mr. Campbell, why don't you begin.

14 MR. CAMPBELL: Thank you, your Honor. I
15 thought it would be useful to begin by framing what the
16 dispute is about and I have just a demonstrative
17 *PowerPoint* that we printed out and I believe that there
18 is a copy available for the court. It is a simple
19 demonstration at the beginning of what an incremental
20 computation, when we're talking about a CRC operation, is
21 all about. In computers, obviously we're dealing with
22 digital math, sometimes called modulo 2 mathematics. And
23 a CRC is a polynomial division into input data. We can
24 address the issue and think about it in base ten
25 mathematics that we're all used to because the principles

1 are largely the same.

2 And, so, what I've got here on Slide Number 2
3 is an illustration of what would happen if we needed to
4 divide a deviser, which would be the polynomial
5 Number 19, into a much larger value --

6 THE COURT: Yeah. I think I understand the
7 basics of it so --

8 MR. CAMPBELL: Okay. Well, if I could just
9 invite you to turn then to Slide 3 and then Slide 4. The
10 one point that I think is useful to grasp is that if we
11 were limited like this calculator to just six digits and
12 we had a larger number that we had to divide by the
13 deviser 19, we could chop it up just like you would do
14 back in grade school days, into smaller groupings of
15 numbers, divide the number into it and find the remainder
16 and then carry that remainder forward. And, so, we would
17 move forward in chunks at a time.

18 And the key point, if you look at Slide 4, is
19 that the remainder that we're showing here, which is two
20 steps into the computation of the entire value, is the
21 remainder not only of the first remainder and the next
22 chunk of data but it is also the remainder of the first
23 two chunks of data. And as we proceed forward to Slide 5
24 and repeat the process again, each time we increment, the
25 remainder from the last value or the last iteration,

1 which is the current state in the language of the
2 patents, is concatenated or combined with the next chunk
3 of data and then the division is made off of that number
4 and you update the remainder.

5 THE COURT: Now, is that always the case; or
6 are there iterations of these CRC checks that work on,
7 let's say, a 32 -- 32 bits of data and then make a
8 determination with respect to each chunk as to whether
9 there is an error in it without carrying forward the
10 remainder?

11 MR. CAMPBELL: It depends on the protocol and
12 the calculation circuit itself.

13 THE COURT: So, the answer is it is possible
14 in some iterations to do it that way without --

15 MR. CAMPBELL: It is.

16 THE COURT: -- carrying forward the remainder.

17 MR. CAMPBELL: Yes. For example, if you look
18 at Column 4 of the patent, near the bottom --

19 THE COURT: Uh-huh.

20 MR. CAMPBELL: This would be Column 4 at about
21 line 59. There is a list there of polynomials that could
22 be used for different degree CRC calculations. The one
23 that says "CRC-8" happens to be a very well-known
24 polynomial that is used for a family of protocols called
25 "ATM." And in particular it is not used for packets of

1 information but, rather, for the header portion of
2 packets. It's an optional thing that you can do with the
3 ATM family of protocols. But that particular CRC
4 computation, CRC-8, if applied to the ATM AAL2 EC
5 calculation, would actually generate a CRC of 8 bits; and
6 the header that it's calculating that over is 32 bits
7 wide.

8 So, if you had a 32-bit ALU with 32-bit wide
9 calculating capability --

10 THE COURT: That would be the processor,
11 right?

12 MR. CAMPBELL: Yes.

13 THE COURT: Yeah.

14 MR. CAMPBELL: That one would be able to
15 conclude in one iteration. Each of the --

16 THE COURT: One clock cycle, you mean.

17 MR. CAMPBELL: It depends again on how
18 pipelined the machine is set up to be. You could set up
19 a circuit so that you are only calculating a few of these
20 at a time if you wanted to.

21 THE COURT: But wouldn't a 32-bit processor do
22 32 -- process 32 bits at a time in parallel?

23 MR. CAMPBELL: Yes.

24 THE COURT: Yeah.

25 MR. CAMPBELL: The one that's disclosed here

1 in the provisional application and suggested in the
2 patent is 32 bits wide. And if all you had were 32 bits
3 to run through, you could run it through if you set up
4 your circuit as an XOR, exclusive-or, gate, meaning to do
5 it all in parallel, you could do it in one clock cycle.

6 THE COURT: Well, your point -- or one of your
7 points is that the CRC circuit doesn't have to process a
8 whole packet at once; it's going to do it in 32-bit
9 chunks. That's --

10 MR. CAMPBELL: Yes and --

11 THE COURT: But I'm not sure there is a
12 disagreement about that. I read Dr. Stone's supplemental
13 expert report, and I'm not sure that he's saying anything
14 different than that.

15 MR. CAMPBELL: I actually think that he is for
16 the following reason. If we look at the other
17 polynomials that are in that list in the patent, each of
18 the others -- the CRC-32, the CRC-16, and the CRC-10 --
19 those also are very well-known polynomials that are used
20 for network communications like Ethernet or some of the
21 ATM families like the adaptation layer 5 or the
22 adaptation layer 3/4. There is another one called
23 "HTLC." Each of those is far larger than 32 bits; and,
24 therefore, if you had a 32-bit calculating circuit, you
25 simply could not process the --

1 THE COURT: You'd have to break it up into
2 chunks, right?

3 MR. CAMPBELL: You would. You would have to
4 break it up into chunks.

5 THE COURT: But I'm not sure that he's
6 suggesting that the patent does anything different than
7 that.

8 MR. CAMPBELL: We believe that he is. And the
9 reason we believe that he is is because the prior art
10 does exactly that. So --

11 THE COURT: But I thought he was pretty clear
12 that he wasn't saying the entire packet had to be
13 processed at once.

14 MR. CAMPBELL: Okay. I think I understand
15 what the court is referring to, and I can clear that up
16 if we look at another part of the patent. I've got a
17 couple of things collected together that might be helpful
18 at Slide 21.

19 At Slide 21 we're showing Figure 3 and then
20 some of the language from Columns 4 and 5 that pertain to
21 Figure 3. Figure 3 is a basic embodiment where we have
22 different calculating CRC circuits. The patent goes on
23 in Column 4 -- and I'm referring now on the left-hand
24 side to the top portion -- to explain that you could
25 implement each of those calculating circuits using a

1 serial calculation circuit where you just processed one
2 bit at a time. The patent does disclose that, and
3 Dr. Stone opines in his report that such an
4 implementation would not lie outside the reach of
5 claim 12 but it would lie outside the reach of claim 16
6 because it's doing one bit at a time.

7 THE COURT: Right.

8 MR. CAMPBELL: Okay. Our point about the
9 problem with his approach has to do with a different
10 embodiment that's also disclosed with reference to
11 Figure 3. If you look down at the last paragraph on
12 Slide 21 --

13 THE COURT: But where -- I thought your
14 contention was that he was saying that the entire packet
15 has to be processed at once in parallel.

16 MR. CAMPBELL: He is, and here's why. It --

17 THE COURT: Well, let me just ask you to sit
18 down for one moment. Let me just ask Mr. Albritton if
19 that is, in fact, what Dr. Stone is saying so that we can
20 see if we're on the same page about this.

21 MR. ALBRITTON: Mr. Joffre -- if it pleases
22 the court, Mr. Joffre --

23 THE COURT: Sure.

24 Is my understanding of Dr. Stone correct or
25 incorrect?

1 MR. JOFFRE: He is not saying that you have to
2 process an entire packet at once. What he's saying is
3 that there has to be a CRC result under the court's
4 construction. And the way that you generate a CRC
5 result -- that's the thing that -- and everybody here has
6 agreed generally what a CRC result is. That's thing you
7 use for error checking. If you take whatever the input
8 data is, divide it by the hardwired polynomial, you will
9 get the CRC result. That's what --

10 THE COURT: Is the difference here between the
11 parties that Stragent says that you can't carry forward
12 the remainder; it has to be on a 32-bit by 32-bit basis?
13 Am I misunderstanding here? I'm just -- I'm confused as
14 to what the -- I understand the disagreement about the
15 shift register and whether there can be shear shift
16 register. We'll talk about that later.

17 MR. JOFFRE: Right.

18 THE COURT: But I am not clear as to what the
19 difference here between the parties is, say, in the
20 definition of "input." It seems to me as though you are
21 both agreeing that input is not the entire packet, that
22 it's broken down into, let's say, 32-bit segments.

23 MR. JOFFRE: Right. What the disagreement, I
24 think, is -- and I can be corrected by Intel. The
25 disagreement is the question what do you run the

1 calculation on. So, in some sense the packet issue is a
2 sideline. The question is do you have a CRC result
3 within --

4 THE COURT: Everybody seems to agree that it
5 doesn't have to process the entire packet at once, right?

6 MR. JOFFRE: Right. The question lies in
7 whether or not the -- what you put into the circuit, what
8 that -- making one CRC result, whether that has to be the
9 full -- the full data that will be subsequently checked
10 by the CRC.

11 So, for example, if you have --

12 THE COURT: Well, if it's a 32-bit processor,
13 you can only do 32 bits at once, right?

14 MR. JOFFRE: That's right. And in that
15 embodiment that's right. That's what you would do.

16 And, so, the point being is that after those
17 32 bits, if you put in those 32 bits into the circuit,
18 the result you must get is a CRC result, which is the CRC
19 check which is used for error checking. So, if you have
20 32 bits, the thing that you have to have at the end of
21 the day is a CRC result. What you're not allowed
22 to have --

23 THE COURT: The CRC result would be either
24 zero or something that's not zero. And if it's zero,
25 there is no error; and if it's greater than zero, there

1 is an error.

2 MR. JOFFRE: Well, in the actual checking
3 portion. In the second CRC operation where you are
4 comparing -- making sure that the data across the line
5 was transmitted correctly, that's right. You do the CRC
6 operation and the end result should be remainder of zero.
7 And that's, in fact, the whole point of doing the CRC
8 computation.

9 The question ultimately is do you have, under
10 the claim language, a CRC operation which is an operation
11 performed using CRC polynomials to generate a CRC result
12 to be used in error checking. And the question then
13 is -- all right. So, what is it that you need to
14 actually do to create the CRC result. And that's defined
15 by the court as well. It is the CRC result, the thing
16 that you're making at the end of the day, is a value
17 equal to the remainder of the input data divided by the
18 CRC polynomial.

19 So, if you take some chunk of data that you're
20 going to want to --

21 THE COURT: So, no carrying forward of the
22 remainder is what you're saying.

23 MR. JOFFRE: What I'm saying is you -- yes.
24 You cannot have -- what you're not allowed to do is to do
25 a computation, call it a CRC computation, but then at the

1 end of the day you don't get a CRC result because in that
2 instance --

3 THE COURT: Because you have to carry it
4 forward.

5 MR. JOFFRE: Yeah. Then you --

6 THE COURT: I mean, that seems to be -- this
7 aspect of it, that seems to -- if I understand correctly,
8 that seems to be the difference between the parties as to
9 whether you can carry forward a remainder and be within
10 the claim language or not.

11 MR. JOFFRE: Right. And the question in
12 the -- specifically, to put it to a specific point, in
13 the prior art, the hydrogen atom prior art, what happens
14 is you don't stick the entire value that you're going to
15 create a CRC result in for. What you do is you run a
16 chunk of the data through, less than the whole amount
17 through, once. You get some number that is not the CRC
18 result; it's a -- (indiscernible) residue. And then you
19 use that in order to -- with the additional next chunk of
20 data to again create another residue. And we're saying
21 that operation is not a CRC operation as defined
22 by the --

23 THE COURT: Yeah. I can understand that.
24 That's the -- apart from the shear and the shift
25 register, whatever, that seems to be the main -- perhaps

1 the only point of disagreement between the parties. Am I
2 understanding correctly?

3 MR. JOFFRE: I think there is the shared issue
4 of circuitry. There is also whether or not -- the
5 question becomes also what does parallel decomposition
6 mean. And I think parallel decomposition -- there's been
7 some fights about what -- one bit versus multiple bits.
8 The whole point of parallel decomposition is that --

9 THE COURT: You've got to do all 32 bits at
10 one time.

11 MR. JOFFRE: Right. I mean, the question
12 is -- if you have a parallel decomposition under
13 claim 16, it says exclusive-or gates configured in a
14 parallel decomposition of the serial CRC calculation
15 circuit. So, you have to take the CRC calculation
16 circuit and then decompose it into a parallel form.
17 That's what our position is.

18 Their position, I believe, if I'm fairly
19 characterizing it, is no you don't need to decompose the
20 entire serial CRC circuit. As long as there is some XOR
21 gates in there that are in parallel, then that will
22 suffice to meet the claim language. And we would say no
23 that's not a decomposition of the circuit. That's just a
24 serial CRC circuit that happens to have two XOR gates in
25 parallel.

1 THE COURT: Okay. Well, I'm not sure that I
2 fully understand that; but let's hear from Mr. Campbell
3 on the other point. So, let's see if there is agreement
4 here.

5 Are you --

6 MR. CAMPBELL: I actually think that was
7 helpful.

8 THE COURT: Yeah.

9 MR. CAMPBELL: And I'd like to explain why.
10 If I could direct the court to Column 3 near the bottom,
11 there is a discussion there about what a CRC result is.
12 And we would preface this, your Honor, first by noting
13 that when you're doing an incremental calculation, you
14 are feeding 32 bits into the circuit, dividing those 32
15 bits by a polynomial, and looking for the remainder.
16 What counsel just referred to as a "residue" is a
17 remainder of that division. It is the polynomial divided
18 into the data that was put into the circuit.

19 THE COURT: Is the difference between you as
20 to whether the remainder can be carried forward or
21 whether each 32-bit thing has to be treated independently
22 and the error check occurs with respect to the 32-bit
23 block without carrying forward a remainder? Is that a --

24 MR. CAMPBELL: Based on what I just heard,
25 this is what I believe the difference to be. We regard

1 those residues as CRC results. The plaintiff does not.
2 And their theory is that the portion of the court's claim
3 construction that says "to be used in error checking"
4 refers solely to a CRC value that gets appended to a
5 packet and sent along. That's fundamentally the
6 difference that they're talking about with respect to
7 hydrogen. Hydrogen does create those check zones that go
8 on packets. It does so incrementally. And they're
9 suggesting to the court that those incremental polynomial
10 divisions are not CRC results.

11 THE COURT: And not within the claim.

12 MR. CAMPBELL: And not within the claim.

13 THE COURT: And that's the basic difference
14 with respect to what we've been talking about.

15 MR. CAMPBELL: That is correct.

16 THE COURT: Okay. And how am I supposed to
17 resolve that issue? What helps me in the specification?

18 MR. CAMPBELL: Okay. If we look at
19 Column 3 -- I'm going to take the court to two different
20 places. I want to answer your question first by focusing
21 on what they rely upon. Column 3 near the bottom. They
22 say that the patent says at line 60 at Column 3 "The CRC
23 operation operates on a block of data as a unit. The
24 block of data can be conceptualized as a single (large)
25 numerical value. The CRC algorithm divides this large

1 value by a number (the CRC polynomial or generator
2 polynomial) leaving the remainder, which is the CRC
3 result."

4 It then goes on to say "The CRC result can be
5 sent or stored along with the original data," and it
6 proceeds from there.

7 They are arguing that the only thing that
8 would qualify as a CRC result in that paragraph is a
9 remainder value that actually gets appended to a patent
10 and sent along. We think that's incorrect for several
11 reasons, and I'd like to just walk through the top two or
12 three briefly with the court.

13 THE COURT: They're saying that this language
14 doesn't allow you to carry forward the remainder.

15 MR. CAMPBELL: I don't think they're saying
16 that it would not allow you to carry forward the
17 remainder. What they're saying is the only thing that
18 qualifies at the end of the day --

19 THE COURT: Under the patent.

20 MR. CAMPBELL: -- under the patent is the very
21 last thing, so that these divisions by the polynomial of
22 data that's input to the circuit 32 bits at a time do not
23 qualify as CRC results. We say that they do qualify as
24 CRC results because they are used in error checking.
25 They are necessary in order to get to a final answer. If

1 you don't have them, you can't get to the final answer.

2 THE COURT: Well, they're saying that each
3 32-bit thing is independent and each -- the result of
4 running this operation under each 32-bit block is a CRC
5 result. Whereas you're saying that within the claim is
6 an embodiment in which the remainder is carried forward
7 and the CRC result is the aggregation, if you will, of
8 those remainders at the end of the data packet. Am I --
9 is that correct?

10 MR. CAMPBELL: Dr. Stone does not --

11 THE COURT: No, but --

12 MR. CAMPBELL: It is not quite correct.

13 THE COURT: Okay.

14 MR. CAMPBELL: And I'd like to explain why.
15 Dr. Stone does not disagree that the hydrogen chip
16 ultimately produces a CRC result. He is saying that the
17 only time it produces the CRC result is when you've
18 gotten to the very last iteration and you're done
19 processing a packet, for example.

20 THE COURT: Right.

21 MR. CAMPBELL: We're trying to say yes, that's
22 a CRC result, we agree; but the earlier iterations are
23 also CRC results within the language of the specification
24 and the understanding of skill in the art and
25 particularly with reference to embodiments that would be

1 read out of these claims otherwise.

2 So, let me just try one more time. When I
3 went through that example with the division at the
4 beginning, each of those iterations produced a remainder
5 which was a division of data input to the circuit by a
6 polynomial. And, so, that -- under what's taught here
7 and what's generally understood, that is a CRC
8 calculation; that's a CRC result. The question is what
9 are you going to do with it. Are you going to stick that
10 one on the end of a packet or are you going to feed it
11 back in its current state so that you can process another
12 32 bits on the way to some sort of final conclusion?

13 THE COURT: Okay.

14 MR. CAMPBELL: Okay. Now, fundamentally the
15 problem that we see can be illustrated by pointing to
16 some other claims that aren't asserted but that use the
17 same language of the claims that are asserted, like input
18 data and CRC circuits. If we look at claim 1 of the '072
19 which is at Column 6, it talks about instructions that
20 indicate CRC operations are to be executed and then a
21 plurality of CRC circuits that perform the operation.
22 And at the last final step of the method, you actually
23 generate the CRC result with the selected CRC circuit.
24 That's the independent claim.

25 If we go down to dependent claim 2, there is a

1 further requirement that you append the CRC result to the
2 input data and transmit the input data and the appended
3 CRC result over the network.

4 So, the idea that the only CRC result that
5 would qualify as a CRC result that the patent is talking
6 about is one that gets -- you know, the final answer is
7 intention here.

8 THE COURT: But it seems to me that this claim
9 language doesn't talk about carrying the interim results,
10 if you will, forward and aggregating them. It just talks
11 about carrying the result forward.

12 MR. CAMPBELL: This one talks about appending
13 the CRC result to a packet and sending the packet to
14 another machine that's then going to do a calculation to
15 see if it gets the same CRC result so that it can compare
16 and conclude whether the --

17 THE COURT: Right.

18 MR. CAMPBELL: That's what it's talking about.

19 The incremental calculations that we're
20 talking about qualify as CRC results because they are
21 polynomial divisions of input data. They don't happen to
22 be appended to a packet. Instead, they are used to move
23 to the next batch of data and continue the calculation.

24 Now, that style of computing is actually
25 described in the specification with reference to

1 Figure 3, Column 4 and Column 5. And I think we can just
2 look at Figure 3 to get the basic point here, and then
3 I'd like to take the court to some language in Column 4
4 which helps to clarify this.

5 Figure 3, at the top -- well, there is a
6 dashed line, first of all, indicating that these are
7 circuits inside of an ALU. I mean, that isn't debated.
8 This is part of the ALU in Figure 2. But you'll notice
9 that it's got an input CRC data line. It's a bus that
10 feeds in data into, you know, each of these circuits --
11 it is shared. But that input CRC data line, as the
12 specification describes, includes two things. It
13 includes what are called "input data," "portions," and
14 current CRC state or "current state." And that can be
15 found, if you flip to Column 4 --

16 THE COURT: Where is the reference here to
17 "current state"?

18 MR. CAMPBELL: It's in Column 4, your Honor.

19 THE COURT: All right.

20 MR. CAMPBELL: At about line 36. It's
21 discussing Figure 3 there. It says, "The selected
22 circuit 305-308 performs the CRC operation on the input
23 data and outputs the CRC results. Although the input CRC
24 data is shown in Figure 3 as being input on a single data
25 line, CRC circuits 305-308 may include two inputs: input

1 data and current state value. These two inputs can be
2 concatenated together and conceptually considered as a
3 single input value."

4 Now, the reason it's called "current state"
5 and then an input data portion and the reason it's
6 referring to concatenation goes back again to the way in
7 which these things typically operate because the packets
8 are so large and the circuits that calculate the CRCs are
9 not big enough to handle them all in one go. So, current
10 state is a reference to what is the existing state,
11 what's the existing remainder, what's the existing
12 residual that we're using. The input data portion is
13 what's the next chunk of data that I need to process.
14 Those two things are concatenated together, fed into the
15 circuit, and you go again. And you keep going until
16 you're done.

17 So, that is an embodiment here that shows this
18 idea of using, you know, an incremental style of
19 calculation to get to a final result; and you have more
20 than one CRC result along the way because you have more
21 than one iteration where you are taking input data,
22 dividing it by a polynomial, and looking for the
23 remainder.

24 THE COURT: Okay. Anything else on this
25 point?

1 MR. CAMPBELL: The only last point that I
2 would make is that there is a passage at Column 5 that
3 makes completely clear that you can do Figure 3 either
4 using serial implementation or a parallel implementation.
5 If you look at line 47, it points out that although the
6 discussion above has been about a serial circuit, in
7 alternative implementations, you can implement them in a
8 parallel fashion.

9 If we consider the polynomials that are listed
10 in the patent at Column 4, with one exception, the others
11 are all polynomials that are used for packets that are
12 too big to calculate all at once; and it would require an
13 incremental style of calculation. So, if you combine the
14 idea that you're going to have these big packets, clearly
15 Figure 3 talks about being able to do it incrementally
16 with the disclosure here that points you to these
17 protocols that have packet sizes that are too big to do
18 all at once, then, your Honor, we would submit that we
19 should not be construing the claims to exclude what the
20 patent's teaching us to use the disclosure for.

21 THE COURT: I'm not sure that they are
22 disagreeing with you about that. I mean, it seems to me
23 that the real difference between you is whether the
24 patent is limited to doing 32 bits at once and coming up
25 with a CRC result or whether -- and then saying that's

1 the end of the matter or whether you're treating the CRC
2 result that you get there as an interim result and
3 carrying it forward. That seems to be the difference
4 between the two of you. Am I misstating it?

5 MR. CAMPBELL: I don't believe that that's the
6 difference between us. And maybe I could make the
7 example very concrete. Some of the prior art performs
8 calculations to correspond to these very polynomials and
9 the protocols that they go with. So, all these big
10 network protocols that have large packet sizes, the prior
11 art addresses handling those. And it does so by using,
12 you know, 32 bits at a time, the incremental style of
13 calculation until you get to the final answer where
14 you've processed everything that you want to. You take
15 that value, you append it to the packet, and you send it
16 along.

17 Their argument is that that style of computing
18 a CRC is outside the reach of claim 12 and also outside
19 the reach of claim 16, and we are arguing that that's not
20 so, that the patent actually teaches you to do it that
21 way, that those things are inside the reach of
22 claim 12 --

23 THE COURT: In that part of claim 4 that
24 you've shown me.

25 MR. CAMPBELL: Correct. And the provisional

1 application also has some instruction in it. It's
2 incorporated by reference that it's similar.

3 THE COURT: Well, let's go to the provisional
4 application and this sharing issue. I don't get much out
5 of that Federal Circuit case that you cited. The claim
6 construction decisions tend not to be easy to carry
7 forward into other technology and other patents. And
8 when I look at the provisional application, it does seem
9 to be rather different from what we're dealing with here
10 in the sense that it doesn't even, as I read it, mention
11 separate circuits. So, to the extent that it shows
12 sharing, I'm not sure that that's what is reflected in
13 the two patents that we're dealing with here. So, could
14 you address that?

15 MR. CAMPBELL: Yes, I can. I would start with
16 Figure 3. And actually I --

17 THE COURT: Figure 3 of the --

18 MR. CAMPBELL: Of the patent.

19 THE COURT: Of the patent.

20 MR. CAMPBELL: I've actually highlighted it in
21 a way that I think will help me explain this to the
22 court. It's on Slide 19.

23 THE COURT: Am I right that there is no
24 reference in the provisional to separate circuits?

25 MR. CAMPBELL: The court is correct that there

1 are fewer details about how the circuits are put together
2 in the provisional than there is in Figure 3, with a
3 couple of exceptions; and that's what I'd like to talk
4 about are the exceptions here.

5 THE COURT: Just a second. I need to --

6 MR. CAMPBELL: Of course.

7 THE COURT: Yeah.

8 MR. CAMPBELL: Okay. At Slide 19 of the
9 handout -- I'm sorry. I was meaning to refer to this
10 slide right here (indicating) first.

11 THE COURT: Okay.

12 MR. CAMPBELL: First of all, let me preface
13 this by saying that we don't disagree that there needs to
14 be a first circuit and a second circuit and we think the
15 claim language itself tells you what needs to be
16 separate. The first circuit needs to have its own
17 hardwired polynomial, and the second circuit needs to
18 have its own hardwired polynomial. There isn't a debate
19 between the parties here about hardwired polynomials
20 existing in the prior art and being separate.

21 The discussion here is whether there are other
22 things about the way the processors are organized that
23 cause those separate hardwired polynomials to collapse
24 into one circuit or not.

25 THE COURT: Right. And you both seem to agree

1 that the provisional shows sharing, right?

2 MR. CAMPBELL: The provisional shows sharing
3 but does not necessarily show you that sharing means one
4 circuit. And that's what I wanted to direct the court's
5 attention to in this highlighted Figure 3.

6 If we think about the style of computation
7 that Figure 3 shows when you're using 32 bits at a time
8 and you're feeding in the current state and input data
9 concatenated together on that input CRC data line, there
10 is a feedback path there that is shared among each of --
11 it is the way you get -- it's the same feedback way that
12 you get data into each of the circuits. So, the CRC-32,
13 the CRC-16, the CRC-10, and the CRC-8 all have a common
14 feedback bus where the current state and the data that
15 you're going to feed to that circuit travel. When you're
16 going to update --

17 THE COURT: Well, which is the feedback bus?
18 How do I know what that is?

19 MR. CAMPBELL: Okay. When you're doing
20 incremental style of calculation --

21 THE COURT: No, in the Figure 3 what --

22 MR. CAMPBELL: Okay. There are two parts to
23 this. And, your Honor, I apologize for this; but when
24 you go back out to Figure 2, you can see an ALU that is a
25 trapezoidal shape like this.

1 THE COURT: Right.

2 MR. CAMPBELL: And it has an output -- a
3 single output that goes around and connects back up to
4 the bus and then inputs coming from the top. So, in
5 Figure 3 the ALU out at the bottom is where the CRC
6 result goes. You update the current state by storing it
7 in a register. And then when you need to use that
8 current state for another iteration, it comes in on the
9 input data line down into the circuits; and you compute
10 another cycle.

11 THE COURT: Okay. But this seems to be a
12 different argument than reliance on the provisional. I
13 was addressing first whether the provisional does you
14 much good.

15 MR. CAMPBELL: Okay.

16 THE COURT: And I'm -- and it does seem to me
17 that the provisional is sufficiently different from the
18 specification and the claims of the two patents that
19 we're addressing here that it's not all that helpful.

20 MR. CAMPBELL: I would reference -- or respond
21 to that --

22 THE COURT: I know it's incorporated, but
23 still.

24 MR. CAMPBELL: Yeah. Let me tell you why the
25 provisional is relevant. It is incorporated by

1 reference; and, so, first of all, we know that an ALU
2 that's 32 bits wide with a 32-bit bus is something that
3 the inventor had in mind for his invention. The other
4 thing that we know is that the provisional describes four
5 specific functions or instructions as "CRC operations."
6 That's a term that shows up in the claims. And if you
7 look at each of those instructions -- it will say, for
8 example, CRC-32. It's got an Operand A, and then it's
9 got Current State B. So, that is a reference in the
10 provisional to this style of incremental computation
11 where you've got protocols of packets that are too big to
12 do 32 bits at a time. That's why we think the
13 provisional is relevant. It teaches that incremental
14 style of calculation. If we move to the patent and look
15 at Figure 3, that's saying --

16 THE COURT: But what does that have to do with
17 sharing?

18 MR. CAMPBELL: In order to do the incremental
19 computation, you have to capture the polynomial division
20 from the first iteration and hold onto it. You may have
21 to hold onto it for a while because in an ALU you're not
22 necessarily going to be able to go right back on the next
23 cycle. There might be something else that the ALU wants
24 to do. So, you have to capture it and hold onto it until
25 you're ready to use it again.

1 So, by engaging in that style of computing a
2 CRC and calling those incremental calculations "CRC
3 operations," that informs us what the patentee had in
4 mind when we move to the main disclosure in the
5 specification.

6 THE COURT: But why -- I mean, it strikes me
7 that the two different styles of computation, if I
8 understand correctly, could just as easily be done with
9 sharing or without. Is that correct?

10 MR. CAMPBELL: It depends on what you mean by
11 "sharing." We don't think in the prior art that there is
12 sharing between the actual CRC circuits. Dr. Stone takes
13 a different view because he's saying that, well, there's
14 a common register where the residue gets written and you
15 have to take that residue as the current state to feed it
16 back on iteration; so, therefore --

17 THE COURT: Well, that does seem to be an
18 issue that's not claim construction.

19 MR. CAMPBELL: It depends, your Honor, on
20 whether that would be required for the embodiments that
21 are disclosed. In other words, it is an issue of claim
22 construction because Dr. Stone is trying to use a
23 particular embodiment and say, well, that embodiment is
24 like the prior art and inside the reach of the claims.
25 We're saying no, the prior art is like a different

1 embodiment inside the reach of the claims and you're
2 trying to read that one outside of it.

3 So, there is a debate, we acknowledge, between
4 what qualifies as the circuit and whether these things
5 that Dr. Stone says are shared should be part of that
6 conversation. But even if it is, our position is that
7 his argument is taking alternative embodiments that are
8 within the reach of the disclosure and moving them beyond
9 the reach of the claims.

10 THE COURT: Well, yeah, I understand that.
11 But you both seem to agree that sharing is an issue here;
12 and I'm just trying to understand why a particular method
13 of computation as opposed to another suggests that there
14 is no sharing. Because if I understand correctly, either
15 method could be performed with or without these shared
16 components. No?

17 MR. CAMPBELL: In the way that it is prepared,
18 in the way that it's described in the specification, the
19 things that Dr. Stone is pointing to in the prior art as
20 being shared have to be used to get data into each of the
21 circuits. You can't get data into the CRC-32 in Figure 3
22 or the CRC-16 in Figure 3 or the others without using the
23 same feedback pathway that's shown here. There isn't
24 another way to do it.

25 So, if you're doing incremental computation,

1 you've got a single output, you've got a register file in
2 Figure 2 where you could hold onto it, and then you've
3 got to feed it back in on this input CRC data. And those
4 are the same things that he's saying in the prior art are
5 shared and therefore collapse everything into a single
6 circuit.

7 And, so, if he's right about that, what he's
8 done is essentially to exclude an embodiment that's
9 taught in the specification. And the way that he gets
10 there -- he has many different pieces to the puzzle --
11 are basically the three terms that we presented to the
12 court for construction.

13 THE COURT: So, what you're saying is that the
14 patent describes a method of computation which can only
15 be accomplished if they're sharing.

16 MR. CAMPBELL: Can only be accomplished if
17 you're doing -- it discloses -- I'm hesitating for the
18 following reason. A circuit designer could choose, you
19 know, to implement a circuit in a couple of different --
20 circuit or circuits in different ways.

21 So, for example, we have prior art where, you
22 know, there is no sharing. There is independent, you
23 know, feedback pathways. That's not very efficient.
24 That's not the way people would typically do it, and it's
25 not the way the provisional suggests that you should do

1 it or that the patent figures suggest that you should do
2 it. You want to be efficient and not unnecessarily use
3 things or double up on things where if you're only going
4 to be doing the computation with one circuit or the
5 other, you know, you use them together. And the patent
6 in Column 4 specifically teaches that these particular
7 circuits in Figure 3 are only going to be used one at a
8 time. It says the instruction is going to indicate which
9 one you're going to use and that's the one that performs
10 the operation.

11 So, the mere fact that you have, you know, a
12 pathway in common to get the data into those circuits we
13 don't think means that they are sharing. They aren't
14 sharing. Dr. Stone says, well, in the prior art that
15 common feedback pathway does mean that it's sharing. So,
16 his argument as applied to what's taught here would
17 exclude an embodiment that we think a person of ordinary
18 skill in the art would conclude is inside the reach of
19 the claims and not outside.

20 THE COURT: Okay. Well, let's hear from
21 Mr. Joffre and then we'll -- you'll have another chance.

22 You might as well start with the sharing
23 issue.

24 MR. JOFFRE: So, the sharing issue, I think,
25 is -- has come up in this way; but it's in some sense a

1 shorthand. What we've always maintained -- and it's
2 fairly clear in the Stone reports -- is that the claim
3 requires a first circuit configured to perform a first
4 CRC operation. So, there has to be one that's configured
5 to perform a first CRC operation.

6 There has to be a second CRC circuit that is
7 configured to perform a second CRC operation.

8 THE COURT: Okay. So, they're saying --
9 putting aside the provisional application which doesn't
10 seem to me to be all that helpful, what they are saying
11 is that the specification contemplates a computational
12 method in which there is sharing rather than separation.
13 What's the answer to that?

14 MR. JOFFRE: There's an easy answer. There
15 are two embodiments. The first embodiment is shown on
16 Column 5, line 37. The first one is "As described
17 above" -- "Multiple CRC operations, each potentially
18 using a different polynomial, may be implemented in
19 separate CRC circuits. The appropriate CRC circuit to
20 use for a particular CRC operation is indicated in the
21 CRC instruction."

22 It then moves on to Column 5, lines 43 to 46.
23 "In alternate implementations, instead of using four
24 separate CRC circuits 305-308, a single CRC circuit could
25 be used that includes four separate hardwired

1 polynomials. At any given time, only one of the four
2 hardwired polynomials may be in use by the circuit."

3 That second alternative embodiment is what's
4 found in claim 6 which is not asserted in this case. As
5 it says in claim 6, there is a circuit -- I'm reading now
6 from Column 6 around line 40. There is a circuit
7 "generating the CRC result using the CRC circuit, the
8 input data, and a selected one of the hardwired
9 polynomials."

10 So, the issue is that the patent discloses one
11 form of CRC circuit where there is a CRC circuit and
12 you're allowed to choose different hardwired polynomials
13 within that circuit. There is a second embodiment where
14 you're talking about a first circuit and a second
15 circuit, and that is the patent that -- the claim that is
16 being asserted --

17 THE COURT: But I understood him to be
18 saying -- maybe I misunderstood. I understood him to be
19 saying in the embodiment where you have separate
20 circuits, that there is nonetheless a description in the
21 specification of doing a computation which involves a
22 sharing of the feedback pathways.

23 MR. JOFFRE: And, in fact, that's not true.
24 So, if you look at page -- it's 19 of their slides.
25 You'll see a lot of highlighted -- they've highlighted it

1 for you, Figure 3; and they are talking about those
2 feedback paths. And they are talking about they're
3 sharing of those feedback paths.

4 If I can direct you to Column 4, lines 50-51.
5 Those lines are not part of the CRC circuit. Rather,
6 this --

7 THE COURT: I'm sorry. Where are you?
8 Column 4?

9 MR. JOFFRE: Column 4, lines 50-51. You can
10 also see this also up around 31.

11 But it says, "CRC calculating circuits
12 305-308" -- the things -- the CRC circuits as shown in
13 this embodiment are those 305, the 306, the 307, the 308.
14 Those are the circuits that are both found in the claim;
15 that's the circuits that are shown in the figure. So, to
16 talk about all of the other stuff around them that might
17 be shared is in some sense irrelevant for the purposes of
18 the claim.

19 THE COURT: Wait. I'm not sure that I
20 understand this sentence. Let's see. "CRC calculating
21 circuits may be implemented similar to circuit 400."

22 MR. JOFFRE: Right. That's on the next page.

23 Figure 4 shows the registers and the actual
24 calculation of a CRC result.

25 THE COURT: Well, are you saying that the

1 highlighted pathways here are not feedback pathways?

2 MR. JOFFRE: We are saying they are not part
3 of the CRC circuit.

4 THE COURT: They're not -- so, how are they
5 identified as not being part of the CRC circuit?

6 MR. JOFFRE: Because they list 305, 306, 307,
7 and 308 in the patent as the CRC circuits. CRC
8 circuits -- you can see this also on Column 4, lines 25.
9 "CRC circuits 305-308 may execute CRC operations based on
10 32, 16, 10, and 8 bit polynomials, respectively." It's
11 305, 306, 307, 308, the boxes, that are the CRC circuits.
12 So, to --

13 THE COURT: And the highlighted pathways are
14 what?

15 MR. JOFFRE: Those are just -- those are ways
16 that the data gets into a CRC --

17 THE COURT: Input?

18 MR. JOFFRE: Yeah.

19 THE COURT: All right.

20 MR. JOFFRE: They're input and output.

21 So, to talk about how that step is shared is
22 irrelevant to the point of whether or not the CRC
23 circuits can share information.

24 THE COURT: Okay. I understand what you're
25 saying.

1 MR. JOFFRE: Okay. So, the whole -- the point
2 here is that you have to have two circuits, and they each
3 have to be configured to perform a CRC operation. That
4 means they have to each be able to generate a CRC result.
5 The reason why this is a fight is because in the hydrogen
6 atom prior art --

7 THE COURT: I understand.

8 MR. JOFFRE: So, I don't have to elaborate.

9 And there's only ever one CRC result. So, you
10 could reconfigure the hydrogen atom to perform a
11 different CRC result, to provide a second CRC result; but
12 you don't have two, at the same time, circuits. And
13 that's why this whole -- you have to be able to calculate
14 two (indiscernible). That's not the point. The point is
15 for there to be anticipation there actually has to be two
16 circuits that are configured at the same time.
17 Otherwise, you don't meet the claim language.

18 THE COURT: Okay. Let's just pause on that.
19 I'd like to hear from Mr. Campbell on this last point
20 before -- and we'll come back to you.

21 So, what's your response to the contention
22 that the highlighted pathways in Slide 19, whatever it
23 is, are not part of the CRC circuits?

24 MR. CAMPBELL: Okay, your Honor. I have two
25 things to say in response to that. First of all, he

1 pointed to a portion of the specification that talks
2 about a serial implementation; and that's not what we're
3 discussing. He took the court directly to a portion in
4 Column 4 where it talks about CRC calculation circuit
5 400. And the figure in -- the CRC circuit at Figure 4 is
6 a serial circuit. There is a different way to do
7 Figure 3, and you have to go over to Column 5 to pick up
8 the language there.

9 And at the very bottom of the column it says
10 "additionally," at line 50, "although CRC circuit 400 is
11 shown as a serial calculation circuit" --

12 THE COURT: I'm sorry. Which line is this?

13 MR. CAMPBELL: Line 50.

14 THE COURT: 50. Okay. Yeah.

15 MR. CAMPBELL: So, "although CRC circuit 400
16 is shown as a serial calculation circuit, in alternate
17 implementations it could be done in a parallel fashion."
18 It says "such a parallel embodiment could be implemented
19 as a circuit exclusive-or gates. The difference between
20 exclusive-or gates and what's shown in Figure 4 is that
21 exclusive-or gates can't hold state. You put data in,
22 and it just passes right through. The serial computation
23 circuit in Figure 4 has flip-flops or registers that do
24 hold state.

25 THE COURT: But still, how do I know that the

1 highlighted portion on Slide 19 is referring to a pathway
2 within the circuit as opposed to an input pathway --

3 MR. CAMPBELL: Think of it this way, your
4 Honor. If we just look at Figure 4, this is the serial
5 circuit. The patent says --

6 THE COURT: Which slide are you looking at?

7 MR. CAMPBELL: I'm looking at Figure 4. It's
8 not in my slide deck. I'm sorry.

9 THE COURT: Okay.

10 Yeah.

11 MR. CAMPBELL: If we look at Figure 4, the
12 patent expressly says that this is showing us a CRC
13 circuit. It's got a series of registers; but
14 importantly, at the far right-hand corner, it has an
15 input. It --

16 THE COURT: Yeah. But what are you saying are
17 the shared pathways? The line at the bottom?

18 MR. CAMPBELL: No. Your Honor, the thing that
19 would be shared is this arrow right here, this little
20 one, the one where it first comes in, the data -- it's
21 concatenated and it first comes into this circuit.

22 THE COURT: How is it labeled?

23 MR. CAMPBELL: It's to the right of 422.

24 THE COURT: The arrow coming in to the right
25 of --

1 MR. CAMPBELL: Yes.

2 THE COURT: Yeah.

3 MR. CAMPBELL: The arrow coming in to the
4 right is showing you how the data, which is labeled 431
5 and 432, are fed into the circuit. So, there is an
6 input --

7 THE COURT: Yeah. But are you contending
8 that's a shared feedback pathway? That doesn't seem to
9 be.

10 MR. CAMPBELL: It is a shared feedback pathway
11 for the following reason. You have to remember that this
12 Figure 4 is illustrative; and if you look at Figure 3,
13 each of those boxes, it's going to have something like
14 Figure 4 in it if you're doing a serial implementation.

15 And the input CRC data, the way that you get
16 these CRC values over here that are state -- current
17 state in Figure 4 into the circuit is on that common bus
18 that feeds into each of them.

19 THE COURT: Yeah, but that sounds like an
20 input.

21 MR. CAMPBELL: It is an input, but the input
22 is necessary in order to do the incremental style of
23 computation.

24 THE COURT: Okay. I think I understand what
25 you're saying.

1 Why don't we go back to Mr. Joffre and you can
2 comment on this last thing and then we'll move on to the
3 other point.

4 MR. JOFFRE: Sure. I think, as was
5 acknowledged, Figure 4, this computation here, that --
6 whatever is shown as 400, that lies inside those boxes.
7 So --

8 THE COURT: It's labeled like 410, 411?

9 MR. JOFFRE: Yeah.

10 THE COURT: Yeah.

11 MR. JOFFRE: So, that all lies inside. So, to
12 talk about other things out there that might be shared,
13 that's not -- I don't take anything from 400 to challenge
14 what we are saying. We're saying yes, there's four
15 separate circuits and they are all doing things
16 separately, or could be doing things -- well, they're all
17 configured, rather, to each do a CRC calculation.

18 THE COURT: This Figure 4 does show sharing;
19 but what you would say, it's sharing of the input
20 pathway.

21 MR. JOFFRE: Right. They are all -- yeah.
22 There are multiple different -- you only -- the data
23 comes in; and, so, it has to go to the circuits.

24 THE COURT: Okay. All right. So, why don't
25 we move on away from the sharing issue into the input

1 issue. But I think we're going to need to hear from
2 Mr. Joffre in response to what Mr. Campbell said before.

3 MR. CAMPBELL: I'm sorry. Which point are we
4 going to be addressing?

5 THE COURT: Well, I think the -- it seemed to
6 me that as part of this discussion, you somewhat narrowed
7 the remaining disagreements here. And if I understand
8 correctly, the fundamental disagreement -- maybe it's not
9 the only disagreement -- is whether the carrying forward
10 of the remainder takes an embodiment outside or takes
11 prior art outside of the scope of the claims here. Does
12 that statement of the issue make sense to you?

13 MR. JOFFRE: I heard that. I don't believe
14 that it takes it -- that there is an exclusion of
15 embodiments in the way he suggests. The reason being --

16 THE COURT: But it is --

17 MR. JOFFRE: I --

18 THE COURT: You've got to tell me whether I'm
19 understanding this right or not, the disagreement between
20 the two of you. It seems to me that the fundamental
21 disagreement is whether the CRC result is the result that
22 you get from processing or doing the CRC computation on,
23 say, a 32-bit chunk --

24 MR. JOFFRE: Right.

25 THE COURT: -- or whether the patent

1 contemplates embodiments in which the remainder is
2 carried forward into some later stage of the computation.

3 Does that make sense to you as a statement of
4 the disagreement between you?

5 MR. JOFFRE: I think that's right. I think
6 what we're -- I think our point is simply that in that
7 instance when we're specifically talking about the
8 hydrogen prior art, we're asking whether or not -- does
9 this residual that it creates at the end of the day, is
10 that a CRC result, is essentially what the question is.
11 And what we're saying is when you go through once and you
12 get this number, it is not a value that is then used to
13 perform error checking. So, therefore, going through
14 this thing and getting --

15 THE COURT: Under the patents.

16 MR. JOFFRE: Under the patent claim and under
17 what the court's previous construction of "CRC result"
18 is. If you go through once, you get some thing; it's not
19 used for error checking. All it's used for is it's some
20 number that will be used -- you know, put through the
21 circuit again and again and again and again and
22 eventually at the end of the day --

23 THE COURT: The hydrogen embodiment, you're
24 talking about?

25 MR. JOFFRE: Yes.

1 THE COURT: Yes.

2 MR. JOFFRE: And eventually you will get to a
3 thing that is a CRC result. And it's not simply us that
4 is pointing to that final thing that is used for error
5 checking as the CRC result. In making his invalidity
6 contentions why the hydrogen prior art reads onto this
7 claim, Dr. Stark pointed to that end result because that
8 is the CRC result, well-known in the art, that you get to
9 use error checking. So, it is the final thing at the end
10 of the day. It's not this iterative -- not every time
11 you go around the loop do you get a CRC result.

12 And, so, our point is you can't use that one
13 value through as an indication that you have produced a
14 CRC result.

15 THE COURT: Your view is that's an interim
16 result.

17 MR. JOFFRE: Right.

18 THE COURT: It's not a CRC result.

19 MR. JOFFRE: That's --

20 THE COURT: The CRC result has to be the final
21 result.

22 MR. JOFFRE: That's right.

23 THE COURT: All right.

24 MR. JOFFRE: That would be the narrowing of
25 the dispute.

1 THE COURT: Okay. So, what -- have I missed
2 anything? It seems to me that this is boiling down to
3 the dispute that we just discussed which I might
4 characterize as the "interim versus final results
5 dispute" and the "sharing dispute." Is there -- am I
6 missing something? Is there another dispute here?

7 MR. JOFFRE: There is the final dispute which
8 is about parallel decomposition. And, so, I can quickly
9 sum up what that dispute is --

10 THE COURT: Okay.

11 MR. JOFFRE: -- if you would care to --

12 THE COURT: Go ahead.

13 MR. JOFFRE: So, the dispute here is what does
14 it mean to decompose a serial circuit in parallel. And
15 what we say is when you decompose under the claim
16 language, you have to create a configuration of exclusive
17 XOR gates that are configured in a parallel
18 decomposition -- i.e., in parallel -- and it has to be the
19 decomposition of the serial CRC calculation circuit.
20 And, so, what we say is under that language, what you
21 need to do is to take the CRC serial circuit that's found
22 in, for example, Figure 4 and then decompose it into
23 parallel components.

24 What you're not allowed to do and what --
25 because it just doesn't make sense given the claim

1 language, is to say, well, as long as I have within that
2 serial CRC circuit any two XOR gates that are set up in
3 parallel, that is a parallel decomposition of the
4 circuit. We would say no, that's not -- the whole point
5 of it is -- in reading the claim language itself, is no
6 you have to decompose the circuit into parallel. And,
7 so, that is why this fight boils down -- comes up in the
8 hydrogen atom. The --

9 THE COURT: I'm not sure that I'm following
10 this. Try again.

11 MR. JOFFRE: Okay. So --

12 THE COURT: I'm -- you referred to XOR gates.
13 Is that -- what's an XOR gate?

14 MR. JOFFRE: So, the XOR gates are the gates
15 that the bits go through that can be seen on Figure 4.
16 For example, you'll see 420 as an example. They are
17 essentially gates where -- they are very, very simple
18 gates where it has two inputs and an output. And if you
19 have an input -- if the two inputs are the same, the end
20 result is going to be zero; but if the two inputs are
21 different -- i.e., a one and a zero -- you're going to
22 get one. So, that's all that the gate does. It just
23 basically does very simple mathematical -- or it can be
24 reduced to a very simple mathematical computation.

25 THE COURT: Okay. So, what's the difference

1 between?

2 MR. JOFFRE: The question is whether or not --
3 this is shown here in Figure 4 as a serial circuit. The
4 reason being is you take the -- you put in the data. You
5 shift everything once. You shift everything -- and if
6 you shift enough times, you'll eventually get the CRC
7 result.

8 THE COURT: What do you mean "if you shift
9 enough times"?

10 MR. JOFFRE: So, the data comes in from the
11 right-hand side. You'll see the input data --

12 THE COURT: Uh-huh.

13 MR. JOFFRE: -- is 101 -- you'll see that at
14 434, for example.

15 THE COURT: Yeah.

16 MR. JOFFRE: You put each one of those into
17 the register as shown in 410, 411, 412, 413. You put
18 those in, feed them in. They're just memory. And then
19 what you do is you shift every clock cycle. And, so, the
20 result -- whatever was found in the register 410 will go
21 back to all those places shown in those arrows. You'll
22 see one goes back to the XOR gates -- each of the XOR
23 gates. Every other bit gets shifted over one.

24 And, so, basically what you're doing is you're
25 pushing the bits through the circuit. And as you do

1 that, the end result of doing that is it turns out
2 cleverly to be equivalent of a mathematical computation
3 of dividing a data by the wired polynomial. So, it is
4 basically a very clever way of doing math very quickly.

5 And, so, you do that through this serial
6 arrangement. What is not shown in any figure, however,
7 is that you can do -- instead of doing this sort of one
8 end at a time in a serial fashion -- and it's not in any
9 figure -- is you can -- it says you can do it in parallel
10 fashion. So, you set up the gates in parallel with one
11 another so that all of the gates would see the same
12 initial input.

13 It's much more complicated than what's shown
14 here, but how to break up a circuit into either a serial
15 or a parallel decomposition is well-known.

16 The question that everybody seems to have
17 focused on is are you allowed to simply have any two
18 gates, any two pieces of circuitry in parallel, in
19 however small amount, or whether or not you have to
20 decompose the entire CRC circuit into a parallel
21 arrangement.

22 THE COURT: You mean 32 bits at once? Is
23 that --

24 MR. JOFFRE: Yes.

25 And, so, what -- the way that this has been

1 characterized is well, you know, how quickly can you do
2 that computation. If you have parallel arrangement, the
3 nice benefit of having a parallel arrangement is that you
4 can do computations much more quickly because you're
5 cheating in all of the data at once. And this was shown
6 primarily in the Stone infringement report. He described
7 how one would break up a circuit in parallel in -- I
8 believe it was paragraph 70.

9 So, the question lies in do you have to take
10 the entire circuit and create a parallel arrangement or
11 can you take any little piece of it and make it parallel;
12 and that is sufficient to meet claim 16.

13 THE COURT: Well, I'm not sure that I'm
14 following this. I thought the dispute was about whether
15 it had to parallel process all 32 bits at once or
16 parallel processing each bit -- each separate bit was
17 sufficient or whether it -- in other words, whether it
18 had to parallel process the entire input or could do it a
19 bit at a time. Am I understanding?

20 MR. JOFFRE: That is another way to
21 characterize the dispute. Because this is written in a
22 structural format, it's basically talking about how do
23 you set up circuits together. This is the way that --
24 the end result of the circuits are going to be whether or
25 not you can do the entire CRC calculation in a parallel

1 circuit which would --

2 THE COURT: For the 32 bits.

3 MR. JOFFRE: Yes, all 32 bits.

4 -- or whether or not you have to -- whether or
5 not you can say, well, you do two bits at a time. And,
6 so, this goes back to Intel's iteration point, that no
7 it's not -- you don't need to do the entire CRC
8 calculation at once; you can sort of break it up.

9 And what we are saying is no, when you are
10 decomposing a circuit, a serial -- it says it's parallel
11 decomposition of a serial CRC calculation circuit. What
12 that means is the end result is that you have to be able
13 to do whatever that CRC circuit was able to do in
14 parallel.

15 THE COURT: Okay. So, what is it in the
16 specification that tells me that your view is right, that
17 it has to do all 32 bits at once?

18 MR. JOFFRE: So, the one place -- there is not
19 much detail in the specification on parallel. But the
20 one place that it is found is in Column 5, line 49. So,
21 you see "Additionally, although CRC circuit 400 is shown
22 as a serial CRC circuit, in alternative implementations,
23 the CRC circuit can be implemented as a parallel
24 decomposition of the serial circuit shown in" 400.

25 So, you took 400 and you've turned it into a

1 serial -- (reading) can be implemented as a parallel
2 decomposition of that circuit. Such a parallel
3 embodiment could be implemented as a circuit of XOR
4 gates. Although the parallel implementation would be
5 much more -- much more complex, it has the virtue that it
6 could generate the CRC result in as little as one clock
7 cycle.

8 THE COURT: So, why does that tell me that
9 it's not -- that it's 32 bits at a time rather than 1 bit
10 at a time or 2 bits at a time?

11 MR. JOFFRE: The reason being is that -- what
12 that says is if you take all the data -- in the serial
13 embodiment you have to go through many clock cycles in
14 order to push the data through the serial circuit. Here
15 it says you don't need to do that. You take the entire
16 chunk of data through the parallel limitation, you will
17 get within one clock cycle the end result. So, it's
18 many, many, many times faster.

19 THE COURT: Okay. I think I understand.
20 Let's hear again from Mr. Campbell.

21 MR. CAMPBELL: Thank you, your Honor.
22 Referring back to that same passage of the specification,
23 it says that the "parallel implementation would require a
24 more complex circuit," but "has the virtue of generating
25 the CRC result in as little as one clock cycle," clearly

1 connoting that it depends. It depends on a number of
2 things. It could calculate it in one clock cycle if you
3 didn't have more data.

4 THE COURT: Well, do you agree that a clock
5 cycle in a 32-bit chip means processing all 32 bits
6 within the single clock cycle? Am I understanding that
7 correctly?

8 MR. CAMPBELL: It depends. It can be, yes.

9 And just to frame this dispute, to take it out
10 to just a slightly higher level briefly, the prior art
11 does 32 bits at a time. Okay? So, there's no debate
12 about that. The prior art circuits that we're talking
13 about process 32 bits at a time.

14 Dr. Stone is saying it doesn't count because
15 some of the packets that they work on are bigger than
16 that; and, so, they're going to have to break it up and
17 do it, you know, a couple of times before they get all
18 the way through the packet. He's saying that you have to
19 do everything all at once. We think, with due respect,
20 that that's crazy because --

21 THE COURT: I'm not -- it might be, but I'm
22 not sure he's saying that.

23 MR. CAMPBELL: Well, I would invite the court
24 to read the deposition testimony of Dr. Stone that we've
25 submitted as Exhibit 1, starting at about page 57 all the

1 way through 63. We walked through several of the
2 protocols that are reflected by the polynomials that are
3 listed in the patent here and asked him, okay, if we're
4 going to take the teachings of Figure 2 and Figure 3 and
5 we're going to try to build a circuit that satisfies the
6 reach of claim 16, would it make any sense to even try?
7 And he said no. It has no practical purpose for -- for
8 those kind of big protocols, you know, with a 32-bit
9 machine, it just makes no sense because what he's saying
10 fundamentally is the only thing that a parallel
11 decomposition could cover in claim 16 is everything all
12 at once.

13 THE COURT: And not just 32 bits --

14 MR. CAMPBELL: Correct. And I pointed out
15 earlier, your Honor, that --

16 THE COURT: Well, suppose I were to say
17 parallel decomposition means you've got to be able to
18 process 32 bits in parallel rather than doing it serially
19 with 1 or 2 bits at a time.

20 MR. CAMPBELL: Then Dr. Stone's --

21 THE COURT: You would be happy?

22 MR. CAMPBELL: I mean, we -- I don't think
23 that's the right construction, your Honor; but it
24 wouldn't exclude the -- you know, the prior art.

25 THE COURT: Well, that's another question

1 which is going to be for the jury, not for me. But --

2 MR. CAMPBELL: I just don't see the principal
3 basis on which you could say 32. If you look at that
4 passage in the specification, I mean, it plainly says
5 that you're going to have a serial calculation that's
6 turned into a parallel decomposition. And if you --

7 THE COURT: Well, what serial calculation --
8 I'm not following it. Where does it say that?

9 MR. CAMPBELL: Okay. All right. If we -- I
10 apologize, your Honor. Let me slow down just twice and
11 point you to two specific things. The language at
12 line 48 of Column 5 is talking about CRC circuit 400.
13 And then it continues on that line. It --

14 THE COURT: It's shown as a serial --

15 MR. CAMPBELL: It's a serial CRC circuit.

16 THE COURT: So, that means it's not parallel
17 decomposition, right?

18 MR. CAMPBELL: Correct. Serial means one bit
19 at a time.

20 THE COURT: Yes, so not parallel.

21 MR. CAMPBELL: Right. So, one bit at a time.
22 If we go to claim 16 and look at what the
23 claim actually says --

24 THE COURT: Okay.

25 MR. CAMPBELL: It is a dependent claim off of

1 claim 12, and it talks about things that the first and
2 second CRC circuits must comprise. So, they need to
3 include but they are not limited to these things. And
4 those things that they have to include are "exclusive-or
5 gates," otherwise known as "XOR gates," "configured as a
6 parallel decomposition of a serial calculation circuit."

7 So, what the claim language on its face is
8 telling us is your first circuit needs to have something,
9 something very specific. It needs to have exclusive-or
10 gates that are arranged as a parallel decomposition of
11 what a serial circuit would do one bit at a time.

12 Now, there isn't anything in the specification
13 that teaches you that that's limited to 32 bits. It
14 simply isn't serial. You process multiple things at the
15 same time; so, two or more bits need to be processed at
16 the same time to satisfy the language of claim 16. If
17 you're doing 32 bits at a time, that's great; but if
18 you're doing fewer than 32 bits at a time that's also
19 within the reach of that claim.

20 THE COURT: So, that's the basic difference
21 between you?

22 MR. CAMPBELL: Yes. And then one final point,
23 your Honor.

24 THE COURT: Would processing one bit at a time
25 be parallel? No.

1 MR. CAMPBELL: It is not because that is the
2 definition of serial.

3 THE COURT: Right.

4 MR. CAMPBELL: And I could give you a --
5 actually this example may help just a little bit. I
6 mean, computers today are different; but back in the old
7 days when we first had PCs, you know, you had to pay
8 attention to what kind of port you had to get to the
9 printer. Back in the old-old days, it was a serial
10 connection where just one bit literally would flow out
11 over the wire at a time. They made it faster by coming
12 up with parallel ports where you had more than one bit
13 that would flow out over the wire at a time but not all
14 of the bits would flow out over the wire at the same
15 time. You still would have the situation where you're
16 processing multiple bits at the same time and you're just
17 moving along.

18 Another illustration that I think might help
19 is if you think about a single lane road. The cars are
20 all lined up bumper to bumper. Only one can get through
21 at a time. You can parallelize that process by adding
22 additional lanes. If you add two, you are now letting
23 cars travel in parallel. And you can make it even more
24 parallel by adding additional lanes. But once you get
25 out of the single lane where you're not doing one bit at

1 a time, you are now in the parallel world where you are
2 processing -- you're working on multiple bits of data at
3 the same time.

4 THE COURT: But if I understand correctly what
5 they're saying, is that if you've got a 32-bit chip, that
6 it has to be able to process all 32 bits in parallel. Am
7 I -- does that make sense?

8 MR. CAMPBELL: That is not what Dr. Stone is
9 saying.

10 THE COURT: No, but -- that seems to be what
11 they're saying today. Is that -- am I --

12 MR. CAMPBELL: It is not. It is not what
13 they're saying. What they are saying is -- let's just
14 take an example. Let's say you had a 32-bit machine and
15 you had a packet that you wanted to calculate a CRC for
16 that's 50,000 bits long. Some of the protocols here are
17 like that. They would say that your 32-bit machine
18 calculating 32 bits at a time is not a parallel
19 decomposition because it's not processing all of the bits
20 at the same time.

21 THE COURT: All 32 at one time.

22 MR. CAMPBELL: No, all 50,000.

23 THE COURT: No, I don't think they're saying
24 that.

25 MR. CAMPBELL: That is what they are saying,

1 your Honor.

2 THE COURT: Well, let's ask Mr. Joffre that.

3 Are you saying it has to be able to process
4 all 50,000 at one time?

5 MR. JOFFRE: No, not -- what we're saying is
6 that if you have a CRC result, then you have to
7 parallel -- you have to process the input data in order
8 to -- at one time in order to get to the input -- to the
9 CRC result.

10 THE COURT: Am I correct that what you're
11 saying is if you've got a 32-bit processor, it has to be
12 able to process 32 bits in parallel? Is that accurate?

13 MR. JOFFRE: Yes. And the point -- and the
14 reason why that's true is because you have to have a
15 parallel decomposition of a serial CRC circuit. So, if
16 you had -- you were able to do a 32-bit serial CRC
17 calculation, you would want to be able to do that -- you
18 would have to decompose the circuit so that it could do
19 that process, you know, parallel configuration. That's
20 what we're saying.

21 And, so, to start talking about there's huge
22 packets, that's fine; but the question lies in whether or
23 not you have -- when you have CRC results. And, so, if
24 you have a CRC result and you have input data, take the
25 input data, you put it through a parallel decomposition

1 of a circuit, and that -- which turns out to be basically
2 one clock cycle, you will produce the CRC result in
3 that -- using that parallel decomposition.

4 THE COURT: Okay. All right. Any final word,
5 Mr. Campbell?

6 MR. CAMPBELL: Just one, your Honor. If you
7 just take that recent example, if you have a 32-bit
8 circuit and your packet is bigger than 32 bits, you
9 obviously aren't going to be able to process all of those
10 bits in one clock cycle.

11 THE COURT: Well, right. That seems to make
12 sense.

13 MR. CAMPBELL: And, so, they're arguing that
14 if you cannot process it in a single clock cycle, you
15 don't have a parallel decomposition. We're saying that
16 the specification, if you look at it, it says it could be
17 completed in as little as one clock cycle. It's worded
18 that way precisely because it's not necessarily going to
19 be. It's going to depend on how much data you've got to
20 process.

21 So, the notion that if you've got a 32-bit
22 circuit, can you process a packet that's bigger than that
23 is the core of the dispute and would be within the reach
24 of claim 16; and that deposition testimony that I cited
25 the court to makes crystal-clear what the disagreement

1 between the parties is on this.

2 THE COURT: Okay. Thank you.

3 Coming back to the preliminary instructions,
4 under Heading 8 Stragent suggested "slightly favors
5 infringement." The only change I'm making in the
6 proposed revisions is to delete the language "slightly
7 favors." So, with that, I think I've got my preliminary
8 instructions.

9 Now, is there any objection to those
10 instructions with these changes?

11 MR. JOFFRE: No, your Honor.

12 THE COURT: Mr. Campbell?

13 MR. CAMPBELL: No objection.

14 THE COURT: Okay. Thank you.

15 All right. So, I'm going to take a break now;
16 and I think -- why don't I give you about half an hour.
17 We'll come back at ten of 12:00. And what I'm going to
18 try to do is to give you the actual claim constructions
19 for these three items and allow you to comment on them or
20 object to them or whatever. And I'm going to try to look
21 at the exhibit objections so that I can deal with
22 those -- well, maybe we'd better make it 12:00 rather
23 than ten of 12:00. And that will give you an opportunity
24 also to look at the two orders that I've entered and see
25 if you have any questions about those.

1 Okay. So, let's take a recess until 12:00.

2 (Recess.)

3 THE COURT: All right. I've done a draft
4 claim construction order which my assistant will bring
5 down in a few minutes and what I would suggest is that we
6 take an hour break for lunch after we get that to give
7 you an opportunity to look at it. You can make any
8 objections or suggest any changes in the order, and then
9 hopefully we'll be done with it. And what I want to be
10 sure is that we get any objections to the order on the
11 record so that we don't have to go through this again at
12 the charge conference. Okay?

13 Now, before we do that, I've been through the
14 exhibits and the objections; and I guess the first
15 question I have is have you both had a chance to read the
16 two orders that were posted this morning?

17 UNIDENTIFIED SPEAKER: No, sir. They have not
18 been posted.

19 THE COURT: They have not?

20 UNIDENTIFIED SPEAKER: No, sir.

21 THE COURT: Okay. We'll check on that. We'll
22 try to get that done now and -- so that you can look at
23 it during the next break.

24 UNIDENTIFIED SPEAKER: Yes, sir. I --

25 THE COURT: Basically, I mean, in simplified

1 form, I've determined that there is a lack of standing on
2 the part of the other plaintiff. I'm going to allow you
3 to introduce and rely on these licenses that were the
4 result of a settlement. I am going to entertain
5 instruction that those perhaps should be -- those should
6 be given lesser weight than the ordinary licenses.

7 And with respect to the hedonic analysis, I've
8 excluded that. And that, it seems to me, would make moot
9 this effort to rely on the Hitt report.

10 Let me ask Mr. Campbell if that's true.

11 MR. CAMPBELL: If the hedonics information is
12 not going to be presented, then Dr. Hitt and his report
13 don't have anything to do with the issues before the
14 court.

15 THE COURT: So, that issue would be moot.

16 MR. ALBRITTON: I think your orders, your
17 Honor, make there really only two live disputes; so, I
18 think that would take care of the Hitt report. Also,
19 your ruling would resolve the issues related to those TAG
20 documents. So, those are not at issue.

21 I believe that the --

22 THE COURT: Well, let's just be clear about
23 it. So, since I'm going to allow you to rely on the
24 licenses, that would mean that there is no longer a
25 dispute as to Exhibit Numbers 39, 48, 49, 50, 51, 52, and

1 53 and 54, 55, 64, and 248; is that correct?

2 MR. ALBRITTON: Your Honor, I think that is
3 partially correct. I certainly agree that that resolves
4 the disputes with respect to Plaintiff's Exhibit 50
5 through 55, 64 and 248. The 39, 48, and 49, I would
6 think that Intel has got a different view of --

7 THE COURT: Oh, I'm sorry. You're right.
8 Yeah. I'm going to -- with respect to -- yes. That's a
9 different issue. 39, 48, and 49, I'm going to allow
10 those to be admitted for a limited purpose. And, so,
11 that resolves that one, I think, right?

12 MR. ALBRITTON: Yes, sir. And then the only
13 remaining issue then, your Honor, would be --

14 THE COURT: So, just to be clear --

15 MR. ALBRITTON: Yes, sir. I'm sorry.

16 THE COURT: 39, 48, and 49 are admitted for
17 limited purpose.

18 50, 51, 52, 53, 54, 55, 64, and 248 are
19 admitted.

20 And then 192 through 196, those are excluded
21 because the issues become moot, correct?

22 MR. ALBRITTON: Yes, sir. We understand that
23 you would not allow them to be admitted.

24 THE COURT: Right.

25 MR. ALBRITTON: Yes, sir.

1 THE COURT: And then with respect to 146, 147,
2 and 148, we're going to -- I'm reserving on those
3 depending on what happens at the trial.

4 MR. ALBRITTON: That's correct.

5 THE COURT: And then with DTX 186, that's moot
6 because of my ruling with respect to the hedonics
7 analysis, right?

8 MR. ALBRITTON: Yes, sir.

9 THE COURT: And then the remaining one is 226,
10 227, and 228 which is the file histories. I'm going to
11 exclude those.

12 Does that take care of everything?

13 MR. ALBRITTON: Yes, sir, it does.

14 MR. CAMPBELL: Yes, your Honor.

15 THE COURT: Okay. So, I assume that you need
16 a little time to review those and need to consult with
17 your experts. Should we -- is 45 minutes enough to do
18 that? Do you want to take a moment just to look at them
19 quickly? You can take a moment now if you want.

20 MR. ALBRITTON: 45 minutes is very acceptable
21 to the plaintiffs, your Honor.

22 THE COURT: Mr. Campbell?

23 MR. CAMPBELL: That will be fine, your Honor.

24 THE COURT: Okay. So, why don't we resume at
25 1:00, then. Okay? Thank you.

1 (Recess.)

2 THE COURT: Okay. What I'd like to do is do
3 this in two steps with respect to the draft claim
4 construction order. The first is to ask whether there
5 are any suggestions that each of you has to make it
6 clearer or to correct an obvious error in here. I
7 obviously don't want you to reargue the whole set of
8 claim construction issues.

9 And then second, once we have a final claim
10 construction that I have adopted, I'm going to ask each
11 of you which parts of it you object to and why and to ask
12 you to propose an alternative in each case so that we
13 have a clear record as to what objections there were to
14 the claim construction.

15 So, why don't we start with Mr. Campbell on
16 this first phase here. Are there any language changes
17 that you would propose in here?

18 MR. CAMPBELL: Your Honor, I understand that
19 you don't want to hear objections and reargument. I
20 guess I would have a comment or two about the first one
21 so that we at least understand what the court is
22 proposing here.

23 I've read these constructions together; and as
24 I've read them together, I will simply advise the court
25 that I do not understand these constructions to be

1 precluding the application of claim 12 to a processor
2 that is set up and intended to compute CRC results for
3 packets that are larger than 32 bits. I'm not
4 understanding this construction to foreclose that. If it
5 does foreclose that, if that's what the intent is, then I
6 do think that we are reading out explicit embodiments
7 that are described in the specification.

8 THE COURT: Well, I am not adopting a
9 construction that the claims require the capability of
10 processing the entire set at one time. I am not saying
11 that it requires that. I am saying that it is within the
12 claims if it can process a batch, say, 32 bits at a time;
13 but it does not require that it be able to process the
14 entire transmission or whatever at one time.

15 MR. CAMPBELL: That is my understanding as I
16 read through the proposed claim constructions together,
17 your Honor.

18 THE COURT: Well, are there any changes that
19 you're proposing here?

20 MR. CAMPBELL: Well, for example, in the first
21 one --

22 THE COURT: Well, let's take them one at a
23 time and then --

24 MR. CAMPBELL: Sure.

25 THE COURT: -- I'll go between you and

1 Mr. Albritton.

2 As to the first one, what changes, if any, do
3 you propose? I'm not asking now for your objections.
4 You'll get a chance to do that. I'm just asking for any
5 proposed changes to make it clearer or easier to
6 understand.

7 MR. CAMPBELL: Your Honor, I think if we were
8 to insert anything at all, we would need to insert a
9 clarification that the fact that two different CRC
10 circuits under some circumstances will have an output
11 register or a feedback path where the output of those
12 circuits will be used is not foreclosed by the
13 construction if there are other circumstances where the
14 computation of the CRC result under the remaining
15 constructions that the court has adopted does not involve
16 any kind of sharing.

17 THE COURT: I'm not sure that I understand
18 that. What specific language change are you proposing?

19 MR. CAMPBELL: We have a first and second
20 circuits in the '072 patent claim 12 and a plurality of
21 CRC circuits in claim 1 that are separate circuits that
22 do not share an output register or feedback paths. What
23 I am simply wanting to clarify, your Honor, is that the
24 existence of a common feedback path or an output register
25 where a CRC result that is otherwise calculated is placed

1 does not foreclose that processor from reading within the
2 reach of the claims.

3 So, for example, if there are some
4 circumstances where in the computation of a CRC result an
5 output register is used and the incremental calculation
6 is fed back on the way to getting to the final outcome,
7 the mere fact of such an output register does not by
8 itself mean that the device is outside the reach of the
9 claims.

10 THE COURT: Well, let's hear from
11 Mr. Albritton.

12 MR. ALBRITTON: Mr. Joffre will speak on that.

13 THE COURT: I'm sorry. Mr. Joffre, right.

14 MR. JOFFRE: I apologize. I'm not sure I
15 understand Mr. Campbell's change. So, I -- we have no
16 objection to this language. We think it's clear. It's
17 separate circuits that do not share output registers or
18 feedback paths. So, I'm not -- I don't quite understand
19 what his proposal is; so, it's hard for me to object.

20 It sounds like he's making an invalidity
21 argument, and I just -- I'm sorry. I apologize. I just
22 don't have a way to respond to it. We are perfectly fine
23 with this language.

24 THE COURT: Okay.

25 MR. CAMPBELL: Would the court like to hear

1 our objection?

2 THE COURT: We'll go through the objections
3 when we finish this first phase. The first phase is to
4 try and clarify it. And I'm not going to adopt the
5 clarification that you suggested because I'm not sure
6 that I understand it. But you can frame it in terms of
7 an objection later on and propose language that you think
8 should go in. Okay?

9 MR. CAMPBELL: Okay.

10 THE COURT: So, let's do the second one. Do
11 you have any suggestions with respect to the second one?

12 MR. CAMPBELL: We don't have any suggestions
13 for the second one. Again, we've read these together.
14 And given the court's construction of "input data," I
15 believe I understand what is here; and I don't have
16 anything specific to propose.

17 THE COURT: Okay. Mr. Joffre, how about the
18 second one?

19 MR. JOFFRE: No objections.

20 THE COURT: Okay. The third one?

21 MR. CAMPBELL: Again, your Honor, I don't have
22 anything specific to propose here. I think we understand
23 what the court has done.

24 THE COURT: Okay. Mr. Joffre?

25 MR. JOFFRE: We just have one minor

1 clarification.

2 THE COURT: Okay.

3 MR. JOFFRE: In the definition, "input data"
4 is (reading) the block of data equivalent in size to the
5 processor's capacity, we would recommend -- this is
6 unclear to us a little bit, and we would recommend
7 instead of using the word "processor" you put in "CRC
8 circuits."

9 The reason why this is unclear is -- I think
10 we've all today been arguing about what's been input into
11 the CRC circuit. The reason there is some lack of
12 clarity, which is the word "processor" alone, is that if
13 we look at Figure 2, you'll see that the entire figure is
14 a network processor; and on the left side, going into
15 network processor there is input, in Figure 2.

16 THE COURT: Yeah.

17 MR. JOFFRE: And then if we go to figure --
18 that's not what we've been arguing about. We've been
19 arguing about, in Figure 3, the input CRC data that goes
20 into the individual CRC circuits.

21 And, so, for example, the statements that are
22 on Column 4 around lines 35-36, those are the input CRC
23 data that we've been talking about. In fact, the 32 bits
24 that is referred to in the parenthetical, it says at
25 Column 4, lines 45 through 46, "In one possible

1 implementation, the input CRC data is four bytes long."

2 That input CRC data is that input CRC data at Figure 3.

3 So, we would just clarify that "input data" is
4 the block of data equivalent in size to the CRC circuit's
5 capacity, e.g., 32 bits for the CRC circuit.

6 THE COURT: Okay. Mr. Campbell, what's your
7 reaction to that?

8 MR. CAMPBELL: Your Honor, I -- it depends on
9 whether we're talking about an instant in time or over
10 time. The processor capacity I think actually does
11 correspond in the figures to the capacity of the number
12 of bits that can be fed at one time into the circuits in
13 Figure 3. So, I don't quite understand the distinction
14 that's being suggested; and I am concerned that we will
15 slip from what the court has indicated here to a larger
16 period of time that (indiscernible) instead of a
17 snapshot, I'm hearing a bit of an argument about needing
18 to look at a longer period of time.

19 If you look at Figure 2, there is a bus that
20 connects the input registers, the output registers, and
21 the ALU. That bus is what feeds into the CRC circuits.
22 So, the processor --

23 THE COURT: The processor capacity limits what
24 can be done in a single clock cycle, right?

25 MR. CAMPBELL: Correct. If we're talking

1 about --

2 THE COURT: I think I'm going to leave this
3 one the way it is.

4 What about the fourth one?

5 MR. CAMPBELL: I'm sorry. The fourth one,
6 again, reading the constructions together, I don't have
7 any suggestions for that one.

8 THE COURT: Okay. Mr. Joffre?

9 MR. JOFFRE: That's clear.

10 THE COURT: Okay. So, now let's go back to
11 Number 1 and get on the record whatever objections there
12 are, starting with Mr. Campbell.

13 MR. CAMPBELL: Yes, your Honor. Just very
14 briefly --

15 THE COURT: Why don't I read it into the
16 record so the record is clear. The first construction is
17 the "first and second circuits" in '072 patent claim 12
18 and the "plurality of CRC circuits" in '244 patent
19 claim 1 are separate circuits that do not share an output
20 register or feedback paths.

21 MR. CAMPBELL: Our objection to this
22 particular instruction, your Honor, arises from the face
23 of the claim language in claim 12 and also claim 1 of the
24 '244. I'll simply refer to claim 12 in my comments here.

25 The claim sets out (reading) a first cyclic

1 redundancy check circuit that is configured to perform a
2 first CRC operation on input data, and then includes the
3 requirement that the first CRC operation being performed
4 uses a first polynomial --

5 THE COURT: You don't need to state the basis
6 for your argument. All I'm looking for is do you have an
7 objection to this first claim construction and what is
8 your language that you would substitute for it.

9 MR. CAMPBELL: Your Honor, we would substitute
10 for this language that the first and second circuits in
11 claim 12 are circuits that have independent hardwired
12 polynomials. The first circuit has its own hardwired
13 polynomial, and the second circuit has its own hardwired
14 polynomial. And there is no other requirement that
15 should be imported into the meaning of the first and the
16 second circuit because that's what the claim language
17 itself says they need to have.

18 THE COURT: Okay. I think your objection is
19 cleared up now.

20 Mr. Joffre, is there any Stragent objections
21 to the first construction?

22 MR. JOFFRE: No, your Honor.

23 THE COURT: Okay. Let's move on to the second
24 one, then. So, Mr. Campbell, is there an objection to
25 the second construction?

1 I'll read that into the record. (Reading) A
2 CRC output result or CRC result is a value equal to the
3 complete remainder of the input data divided by a CRC
4 polynomial, but not a partial remainder or interim result
5 that is carried forward for use in a successive operation
6 of the same circuit.

7 MR. CAMPBELL: Yes. Our objection is that we
8 believe that the language after the comma but should be
9 stricken from the construction, that a CRC calculation
10 that proceeds incrementally and generates a CRC
11 computation and successive requirements would have
12 multiple CRC results that would qualify within the
13 meaning of the claim language.

14 THE COURT: Okay. Mr. Joffre, is there any
15 objection to that?

16 MR. JOFFRE: No objection.

17 THE COURT: Okay. So, let's go on to
18 Number 3, then, which is (reading) input data is the
19 block of data equivalent in size to the processor
20 capacity, e.g., 32 bits for a 32-bit processor but not
21 necessarily entire data package from which a complete CRC
22 result is to be calculated by performing a CRC operation.

23 Mr. Campbell, is there an objection to that?

24 MR. CAMPBELL: We do not object to that, your
25 Honor.

1 MR. JOFFRE: We don't object, your Honor.

2 THE COURT: Okay. You should stand up.

3 MR. JOFFRE: Oh, sorry.

4 THE COURT: Okay. The final one is (reading)
5 a parallel decomposition of a serial CRC circuit is a
6 circuit that calculates a CRC result by processing all
7 bits of the input data at one time instead of a lesser
8 number of bits such as 2.

9 Mr. Campbell, do you have an objection to
10 that?

11 MR. CAMPBELL: No, your Honor. Subject to the
12 objection that I made with respect to Number 1, aside
13 from that, we don't have anything further.

14 THE COURT: Okay. Mr. Joffre?

15 MR. JOFFRE: No, your Honor.

16 THE COURT: Okay. All right. Good. We'll
17 issue this order this afternoon.

18 Did you-all have a chance to see the orders
19 which were entered in the docket? Did you have a chance
20 to review that?

21 MR. ALBRITTON: Briefly, your Honor. We
22 didn't have a chance to study them in great detail, but
23 we looked at them briefly.

24 THE COURT: Do you have any questions based on
25 your review?

1 MR. ALBRITTON: No questions that require
2 clarification at this point, your Honor, no.

3 THE COURT: Okay. Mr. Campbell, how about
4 you?

5 MR. CAMPBELL: I have not had -- I have not
6 been able to get access to them quite yet and I haven't
7 read them, but I don't have any questions. I understand
8 what the court has said earlier today.

9 THE COURT: Okay. Well, I have a few final
10 items here.

11 First of all, have the parties stipulated to
12 the level of skill in the art?

13 MR. BUMGARDNER: It's been opined --

14 THE COURT: You need to say who you are
15 because the person making the transcript otherwise
16 wouldn't be able to figure it out.

17 MR. BUMGARDNER: Certainly, your Honor. Barry
18 Bumgardner on behalf of Stragent.

19 It is contained in the expert opinions. I
20 believe it does differ slightly, although I don't believe
21 there are dramatic differences. I believe Stragent's
22 person with ordinary skill in the art is a little bit
23 lesser skill than the one of Intel but -- I might have
24 that backwards, and Mr. Campbell can correct me. They
25 are not the same, but they're close.

1 MR. CAMPBELL: They are very close, your
2 Honor.

3 THE COURT: Maybe the two of you could get
4 together and come up with a single definition so that the
5 jury doesn't get confused.

6 MR. CAMPBELL: Sure.

7 MR. BUMGARDNER: I think we can, your Honor.

8 THE COURT: Okay. That would be good.

9 Now, I need to know what questions counsel
10 want me to ask at the jury *voir dire*. Have you submitted
11 questions? What's your position on that?

12 MR. ALBRITTON: We didn't submit any specific
13 questions, your Honor. We would just ask the court to
14 inquire as to the jurors' -- where they work. This will
15 be on the jury questionnaire, of course; but it might --

16 THE COURT: On the -- aren't there standard
17 questions that are put on the screen?

18 MR. ALBRITTON: The way -- it varies a little
19 bit in Marshall with what Judge Gilstrap, for instance,
20 does than what Judge Davis does. I believe Judge Davis'
21 standard is he even asks them to say what their hobby is.
22 What I would just respectfully suggest is that the court
23 ask are they married, what do they do for a living, and
24 if they are retired what did they do before they retired,
25 what does their spouse do for a living, and if the spouse

1 is retired what did the spouse do prior to retirement;
2 and really there is nothing else in particular, your
3 Honor. Just basic biographical information that the
4 court thinks is appropriate.

5 THE COURT: I don't have any problem with
6 that.

7 Mr. Campbell, is there anything else that you
8 think ought to be in there?

9 MR. CAMPBELL: Your Honor, Judge Davis'
10 standard question is as Mr. Albritton suggested, to
11 simply ask them at the beginning what they like to do in
12 their free time; and we think that would be a good thing
13 to ask.

14 THE COURT: Okay. That's fine.

15 MR. ALBRITTON: We're certainly not going to
16 object to that, your Honor.

17 THE COURT: So, the two of you will get
18 together and agree on what gets put up on the screen for
19 the jurors to address?

20 MR. CAMPBELL: Yes.

21 MR. ALBRITTON: Yes, sir.

22 THE COURT: Okay. Good.

23 And then I've asked you to come up with a
24 document for the jury that sets forth the claims
25 incorporating the language of claim 12 into claim 16 and

1 also setting forth the court's claim construction. So,
2 why don't we call that document "List of Asserted Claims
3 and Court's Construction of Claim Terminology." And if
4 you could get together and come up with proposed language
5 by close of business tomorrow that I could review, that
6 would be helpful.

7 MR. ALBRITTON: Your Honor, could you
8 repeat -- "List of Asserted Claims and"?

9 THE COURT: "Court's Construction of Claim
10 Terminology."

11 If you want to suggest calling it something
12 else, I'm happy to entertain it; but that seemed to me to
13 be descriptive.

14 MR. ALBRITTON: Yes, sir. That sounds fine to
15 us, your Honor.

16 THE COURT: Okay. So, why don't you both get
17 together and come up with a document which you jointly
18 submit -- and I can look at it over the weekend -- by the
19 close of business tomorrow.

20 Then, as I think I mentioned, I'd like to get
21 supplemental revised claim constructions for the
22 invalidity contentions. It seems to me it would be a lot
23 clearer to the jury if, for example, there were an
24 instruction that says "Intel claims that claim 10 is
25 invalid because it was anticipated by the" -- whatever,

1 the hydrogen reference or whatever, so that there is
2 something specific in the instructions that the jury
3 could focus on saying "I'm supposed to be determining
4 anticipation with respect to this one reference and
5 obviousness with respect to a combination of
6 such-and-such references."

7 Is there any problem in doing that,
8 Mr. Campbell?

9 MR. CAMPBELL: No, your Honor. We'd be happy
10 to do that.

11 THE COURT: Okay.

12 MR. ALBRITTON: That's agreeable to us, your
13 Honor.

14 THE COURT: Okay. Then why don't you do that
15 and again plan to get me those supplemental instructions
16 by the close of business tomorrow. Okay?

17 And then you also need, I think, to agree on a
18 new verdict form because we're going to ask for separate
19 verdicts on the wafers and the chips. Can you get
20 together and get me a revised proposed verdict form?

21 MR. ALBRITTON: Yes, sir, we will.

22 THE COURT: Okay. And I think that's it.

23 I just want to caution Stragent. Now that
24 I've issued -- or am about to issue this claim
25 construction order, Dr. Woods has to be careful not to

1 start supplementing my claim construction order or adding
2 other claim constructions. Okay?

3 MR. ALBRITTON: Yes, sir. We are very
4 cognizant of that fact, and Dr. Stone will adhere
5 strictly to the court's constructions.

6 THE COURT: Did I say "Woods"? I meant
7 Stone. Okay.

8 MR. ALBRITTON: Well, it's all a matter of --
9 wood, stone...

10 THE COURT: All right. And the same would be
11 true for Intel's expert witnesses.

12 Is there anything else that either one of you
13 would like to raise now?

14 Mr. Albritton?

15 MR. ALBRITTON: I don't believe so, your
16 Honor. Nothing on behalf of the plaintiff.

17 THE COURT: Okay.

18 MR. CAMPBELL: I don't have any --

19 MR. ALBRITTON: I do have one question just as
20 a matter of procedure. If one of the parties were
21 inclined to make an offer of proof for appellate
22 purposes, does the court have a preference on how that's
23 done? Sometimes Judge Davis will, for instance, just let
24 the parties do a written offer of proof. Would that be
25 satisfactory to the court, or would the court like to

1 hear the witness live as to any matters? And I'm not
2 certain that there will be that; but there may be issues
3 for Intel, may be issues for us. So, that was my first
4 question.

5 And the second question was as to timing.
6 Should that be done -- does that need to be done before
7 that witness testifies or just before the party rests its
8 case? I just didn't know what the court's preference
9 was.

10 THE COURT: So, the predicate assumption here
11 is that I've sustained an objection to part of the
12 witness' testimony and you want to have a proffer as to
13 what the witness would testify to?

14 MR. ALBRITTON: Yes, possibly, your Honor.
15 So, like, for instance, if there was to be an offer of
16 proof made with respect to the hedonic regression, for
17 instance.

18 THE COURT: Oh, I see. Yeah, that could be
19 done in writing. That's not a problem. And you could do
20 that before the close of your case.

21 MR. ALBRITTON: Thank you very much, your
22 Honor.

23 THE COURT: But is there any other issue other
24 than --

25 MR. ALBRITTON: No, sir. There may be issues

1 that Intel would want. I don't know. But that was one
2 that just came to mind as a potential issue with respect
3 to our case.

4 THE COURT: Okay. Mr. Campbell?

5 MR. CAMPBELL: I don't have anything further
6 for the court today.

7 THE COURT: Okay. Thank you both, counsel. I
8 appreciate your coming here. I think that your choice to
9 do that was a good one. That made it a lot easier for me
10 and hopefully easier for you, too.

11 MR. ALBRITTON: Thank you very much.

12 MR. CAMPBELL: Thank you.

13 THE COURT: Okay. Thank you.

14 (Proceedings adjourned.)
15

16 CERTIFICATION

17 I certify that on this date, March 6, 2014,
18 the foregoing is a correct transcript from the electronic
19 sound recording of the proceedings in the above-entitled
20 matter.

21 /s/
TONYA B. JACKSON, RPR-CRR

22 /s/
CHRISTINA L. BICKHAM, RMR-CRR
23
24
25

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